

## Development of a new therapeutic for directing target specific stem cell migration and treatment

## **Grant Award Details**

Development of a new therapeutic for directing target specific stem cell migration and treatment

Grant Type: Quest - Discovery Stage Research Projects

Grant Number: DISC2-12666

Investigator:

Name: Ziwei Huang

Institution: University of California, San Diego

Type: PI

Disease Focus: Amyotrophic Lateral Sclerosis, Neurological Disorders

Human Stem Cell Use: Adult Stem Cell

**Award Value:** \$1,129,512

Status: Pre-Active

## **Grant Application Details**

Application Title: Development of a new therapeutic for directing target specific stem cell migration and treatment

Public Abstract: Research Objective

A drug-stem cell combination therapy wherein the drug will direct and promote the delivery and distribution of stem cells to the disease site for the optimal therapeutic effect of the stem cells

**Impact** 

Amyotrophic lateral sclerosis (ALS) and the way to deliver and enhance stem cell-based treatment of ALS

## **Major Proposed Activities**

- Complete the additional in vitro studies and initiate the in vivo studies in SOD1 mouse model
- Determine whether the combined effect of hNSCs intraparenchymally augmented/guided by SDV1a has a synergistic effect on improving disease onset/progression & symptom-free survival in the SOD1 mouse
- Establish the preliminary toxicity and pharmacokinetics profiles of SDV1a in mouse model
- Elucidation of structure and other characteristics; development and validation of analytical procedures
- Process development and characterization in lab scale, stability study

California:

Statement of Benefit to This new therapeutic will address a significant unmet medical need in the treatment of amyotrophic lateral sclerosis (ALS) and have important benefits to the patients with ALS and impact on the healthcare and bio industry in California.

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